

WHAT IS CLAIMED IS:

1. A belt reel for fastening goods on a truck, comprising an axle extending through a main frame and a lever to pivotally mount the main frame and the lever to each other, the axle having two opposite ends each having a ratchet wheel mounted thereto between the main frame and the lever and rotated with the axle, each ratchet wheel having a series of teeth radially extending therefrom, a slot diametrically defined in the axle for allowing a belt extending through the axle, the main frame including a stop plate slidably mounted therein and a spring compressively mounted between the main frame and the stop plate so that the stop plate is engaged to the two ratchet wheels due to a restitution force of the spring, the lever including a pawl slidably mounted therein and a resilient member mounted between the lever and the pawl so that the pawl is selective engaged to the two ratchet wheels due to a restitution force of the resilient member, the lever including a pivot portion having two opposite sides each having a convex portion extending from the lever and corresponding to the two opposite sides of the stop plate, the main frame includes a pivot end having two opposite sides each sequentially having a concave portion defined in the main frame, a stopper extending from the main frame, a groove defined in the main frame, an indentation defined in the main frame and a connecting portion formed between the groove and the indentation, the groove including a first side formed adjacent to

the stopper and a second side formed adjacent to the connecting portion,
the convex portion backward pushing the stop plate to make the stop
plate disengaged from the ratchet wheels when the pawl abuts the
second side of the groove, the convex portion backward pushing the
5 stop plate to make the stop plate disengaged from the ratchet wheels
and the pawl disengaged from the ratchet wheels when the pawl is
partially received in the indentation;

wherein the improvement comprises:

two plates respectively pivotally mounted to two opposite
10 sides of the main frame, each plate having a cam portion extending
therefrom to the groove, the cam portion being tapered and having a
first guide side and a second guide side, the cam portion making the
pawl moved over the series of teeth of each of the ratchet wheels, each
plate being positioned when the pawl is moved over the cam portion,
15 the pawl moved along the first guide side when the pawl is moved
within the groove toward the second side of the groove, the pawl firstly
clamped between one tooth of the each of the ratchet wheels and the
cam portion and secondarily moved over the cam portion along the
second guide side when the pawl is moved within the groove toward
20 the first side of the groove due to a reverse ratchet; and

a protrusion extending from each of the connecting portion
toward the stopper, the protrusion extending through the pawl when the
pawl is moved toward the second side of the groove and abuts the

protrusion that guides the pawl to the indentation.

2. The belt reel as claimed in claim 1, wherein each plate comprises a first stopper and a second stopper respectively extending therefrom opposite to the cam portion and the stop place is located
5 between the first stopper and the second stopper to prevent the plate from being overly rotated and selectively hold the plate in place when the pawl is moved over the cam portion.

3. The belt reel as claimed in claim 1, wherein the main frame comprises two arc slot respectively defined in two opposite sides of the
10 main frame near the axle, and each plate comprises a stub laterally extending therefrom and slidably received in a corresponding one of the two arc in the main frame to prevent the plate from being overly rotated and selectively hold the plate in place when the pawl is moved over the cam portion.

15 4. The belt reel as claimed in claim 1, wherein the two plates are respectively mounted to two opposite ends of the axle and the main frame comprises two arc slot respectively defined in two opposite sides of the main frame near the axle, a curvature of each of the arc slots concentrically corresponding to the axle, each plate including a stub
20 laterally extending therefrom and slidably received in a corresponding one of the two arc in the main frame to prevent the plate from being overly rotated and selectively hold the plate in place when the pawl is moved over the cam portion.

5. The belt reel as claimed in claim 2, wherein the main frame comprises two arc slot respectively defined in two opposite sides of the main frame near the axle, and each plate comprises a stub laterally extending therefrom and slidably received in a corresponding one of the two arc in the main frame to prevent the plate from being overly rotated and selectively hold the plate in place when the pawl is moved over the cam portion.

6. The belt reel as claimed in claim 2, wherein the two plates are respectively mounted to two opposite ends of the axle and the main frame comprises two arc slot respectively defined in two opposite sides of the main frame near the axle, a curvature of each of the arc slots concentrically corresponding to the axle, each plate including a stub laterally extending therefrom and slidably received in a corresponding one of the two arc in the main frame to prevent the plate from being overly rotated and selectively hold the plate in place when the pawl is moved over the cam portion.

7. The belt reel as claimed in claim 5, wherein the pawl comprises a cutout defined therein for allowing the protrusion extending through the pawl.

8. The belt reel as claimed in claim 5, wherein the pawl comprises an opening defined therein for allowing the protrusion extending through the pawl.

9. The belt reel as claimed in claim 6, wherein the pawl

comprises a cutout defined therein for allowing the protrusion
extending through the pawl.

10. The belt reel as claimed in claim 6, wherein the pawl
comprises an opening defined therein for allowing the protrusion
5 extending through the pawl.